ABSTRACT

"ANALYTICAL STUDY OF PROGNOSTIC FACTORS INFLUENCING VISUAL OUTCOME IN PATIENTS OF INDIRECT TRAUMATIC OPTIC NEUROPATHY"

BACKGROUND

Indirect traumatic optic neuropathy occurs in young patients with head injury as a consequence of road traffic accidents or falls. The treatment options available for indirect traumatic optic neuropathy are conservative , medical and surgical managements.

OBJECTIVES

Objectives of the study is to analyse the prognostic factors which influence the visual outcome in patients with Indirect traumatic optic neuropathy.

MATERIALS AND METHODS

A hospital based prospective study was conducted in Coimbatore medical college hospital from August 2014 to July 2015 in patients admitted with head injury after diagnosis of indirect traumatic optic neuropathy . All patients were treated with high dose steroid therapy and visual improvement was assessed during the period of 3 months follow up.

RESULTS

The study showed that visual improvement was good in patients in whom steroid therapy was started within 24hours following injury. Among the patients who had visual recovery 87% of them showed visual improvement within 48hours of treatment. Both of these above findings were statistically significant. There was strong association between initial visual acuity following injury and final vision attained in 3months($p<0.01$),with good visual improvement in more than 70% of patients having vision of more than counting of fingers. There was no association of visual recovery, with age of the patients or with loss of consciousness.

CONCLUSION

The final visual recovery in patients with indirect traumatic optic neuropathy was good in patients with initiation of steroid treatment within 48hours of injury, in patients showing improvement within 48hours of starting treatment and in patients with initial vision of more than counting of fingers. Patients with immediate amaurosis had no further visual improvement.

KEYWORDS

Indirect traumatic optic neuropathy, Relative afferent pupillary defect, Methylprednisolone, Head injury, Visual improvement.